BookletChartTM

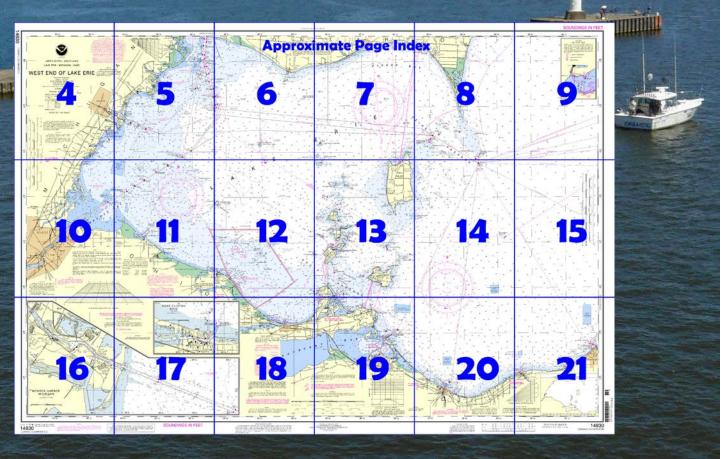
West End of Lake Erie NOAA Chart 14830



A reduced-scale NOAA nautical chart for small boaters When possible, use the full-size NOAA chart for navigation.



- Complete, reduced-scale nautical chart
- Print at home for free
- Convenient size
- Up-to-date with Notices to Mariners
- Compiled by NOAA's Office of Coast Survey, the nation's chartmaker



Published by the National Oceanic and Atmospheric Administration National Ocean Service Office of Coast Survey

<u>www.NauticalCharts.NOAA.gov</u> 888-990-NOAA

What are Nautical Charts?

Nautical charts are a fundamental tool of marine navigation. They show water depths, obstructions, buoys, other aids to navigation, and much more. The information is shown in a way that promotes safe and efficient navigation. Chart carriage is mandatory on the commercial ships that carry America's commerce. They are also used on every Navy and Coast Guard ship, fishing and passenger vessels, and are widely carried by recreational boaters.

What is a BookletChart[™]?

This BookletChart is made to help recreational boaters locate themselves on the water. It has been reduced in scale for convenience, but otherwise contains all the information of the full-scale nautical chart. The bar scales have also been reduced, and are accurate when used to measure distances in this BookletChart. See the Note at the bottom of page 5 for the reduction in scale applied to this chart.

Whenever possible, use the official, full scale NOAA nautical chart for navigation. Nautical chart sales agents are listed on the Internet at http://www.NauticalCharts.NOAA.gov.

This BookletChart does NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 44 of the Code of Federal Regulations.

Notice to Mariners Correction Status

This BookletChart has been updated for chart corrections published in the U.S. Coast Guard Local Notice to Mariners, the National Geospatial Intelligence Agency Weekly Notice to Mariners, and, where applicable, the Canadian Coast Guard Notice to Mariners. Additional chart corrections have been made by NOAA in advance of their publication in a Notice to Mariners. The last Notices to Mariners applied to this chart are listed in the Note at the bottom of page 7. Coast Pilot excerpts are not being corrected.

For latest Coast Pilot excerpt visit the Office of Coast Survey website at http://www.nauticalcharts.noaa.gov/nsd/searchbychart.php?chart=148 30



(Selected Excerpts from Coast Pilot)
Vermilion, about 34 miles W of Cleveland, has a harbor used mainly by fishing and recreational craft. The harbor comprises the lower 3,000 feet of the Vermilion
River, and an approach channel from the lake. About 0.6 mile SE of the river entrance, a lighted tank with the name VERMILION on the side is prominent.
Huron Harbor is about 44 miles W of Cleveland inside the mouth of the Huron River at the city of Huron, Ohio.

Huron Harbor Light (41°24.3'N., 82°32.6'W.), 80 feet above the water, is shown from a white square pyramidal tower on the W pierhead. A fog

signal is at the light.

6 feet at the edges.

From Huron, the wooded shoreline trends NW for 9.7 miles to **Cedar Point** (41°29.5'N., 82°41.3'W.), the SE entrance point to Sandusky Bay. In this stretch, deep water is about 0.9 to 1.2 miles off except at Cedar Point where the shallow depths widen to 1.5 miles.

Sandusky Harbor, serving the city of Sandusky, Ohio, is in the SE part of Sandusky Bay about 50 miles W of Cleveland. The harbor is a major shipping point for coal. Sand, gypsum, and fish are also handled. The harbor is an excellent natural harbor of refuge for small craft. Sandusky Bay extends W from its entrance between Cedar Point and Bay Point for about 15 miles to **Muddy Creek Bay**. **Sandusky River** flows into the S side of Muddy Creek Bay. Small craft can navigate through Sandusky Bay, Muddy Creek Bay, and upstream in the Sandusky River for about 15 miles to the Norfolk Southern Railway Bridge at the town of Fremont, Ohio. Depths of about 5 feet can be carried through Sandusky Bay, thence 2 to 4 feet through Muddy Creek Bay, and 2 to 19 feet in the river. The channels through the bays are indefinite and not marked. The entrances to Muddy Creek Bay and the Sandusky River are marked by uncharted buoys that are frequently moved to mark the best water. Marblehead Coast Guard Station is close W of Marblehead Stone Docks. A small sheltered basin at the station has depths of 8 feet decreasing to

Between Catawba Island and **Locust Point** (41°36.2'N., 83°05.0'W.), a rounding projection 12 miles W, a broad open bight has depths less than 24 feet. The Portage River empties into the S side of the bight. A large shallow bank with depths less than 14 feet extends about 5.5 miles N and NE off Locust Point. A least depth of 2 feet, marked on the E side by a buoy, is about 4.7 miles NE of the point, and there are scattered patches of 3 to 10 feet elsewhere. **Niagara Reef**, a detached shoal with a least depth of 3 feet, is 6.8 miles NE of the point and is marked on the N side by a lighted buoy.

Huron Harbor Dangers.—An extensive area of fish net stakes is off the entrance to Huron Harbor.

Huron is within the Sandusky customs port of entry.

Quarantine is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.)

Harbor Regulations.—A speed limit of 6 mph (5.2 knots) is enforced in the harbor except in the outer harbor where the speed limit is 10 mph (8.7 knots). (See 33 CFR 162.155 and 207.570, chapter 2, for regulations.)

Sandusky Harbor Dangers.—In 1977, it was reported that the jetty extending NE from Cedar Point is partially submerged during periodic high water conditions.

Caution.—A submarine cable crosses the inner end of Moseley Channel; vessels are cautioned not to drag anchor in this area.

Sandusky is a customs port of entry.

Toledo is a customs port of entry.

Quarantine is enforced in accordance with the regulations of the U.S. Public Health Service. (See Public Health Service, chapter 1.) **Harbor regulations.**—Speed in harbor. In Maumee Bay, lakeward of Maumee River Lighted Buoy 49, no vessel greater than 100 feet long shall exceed 12 mph (10.4 knots). No person shall operate any vessel over 40 feet long in the harbor at a speed greater than 6 mph (5.2 knots). Vessels greater than 100 feet long shall not overtake another vessel in the harbor. (See **33 CFR 162.150**, chapter 2, for speed limits and regulations.)

U.S. Coast Guard Rescue Coordination Center 24 hour Regional Contact for Emergencies

RCC Cleveland Commander

9th CG District (216) 902-6117 Cleveland, OH

2

+ Submerged well head

Pump-out facilities

NOTE E

For project and controlling depths use chart 14845.

Approach to Toussaint River Entrance is marked by six buoys. These buoys are not shown because they are frequently shifted in position.

the U.S. Coast Guard Local Notice to

CAUTION

BASCULE BRIDGE CLEARANCES

For bascule bridges, whose spans do not open to a full upright or vertical position, unlimited vertical clearance is not available for the entire charted horizontal clearance.

RADAR REFLECTORS

Radar reflectors have been placed on many floating aids to navigation. Individual radar reflector identification on these aids has been omitted from this chart.

CAUTION

Improved channels shown by broken lines are subject to shoaling, particularly at the edges.

NOAA WEATHER RADIO BROADCASTS

The NOAA Weather Radio stations listed below provide continuous weather broadcasts. The reception range is typically 20 to 40 nautical miles from the antenna site, but can be as much as 100 nautical miles for stations at high elevations.

Adrian, MI	WNG-647	162.450 MHz
Cleveland, OH	KHB-59	162.550 MHz
Detroit, MI	KEC-63	162.550 MHz
Grafton,OH	WNG-698	162.500 MHz
Sandusky, OH	KHB-97	162.400 MHz
Toledo, OH	WXL-51	162.550 MHz

SUBMARINE PIPELINES AND CABLES

Charted submarine pipelines and submarin ables and submarine pipeline and cable areas are shown as:

~~~~~

Additional uncharted submarine pipelines and submarine cables may exist within the area of this chart. Not all submarine pipelines and submarine cables are required to be buried, and those that were originally buried may have become exposed. Mariners should se extreme caution when operating vessels in depths of water comparable to their draft in areas where pipelines and cables may exist and when anchoring, dragging or trawling.

Covered wells may be marked by lighted or

### CAUTION

Limitations on the use of radio signals as aids to marine navigation can be found in the U.S. Coast Guard Light Lists and National Geospatial-Intelligence Agency Publication 117. Radio direction-finder bearings to commercial

broadcasting stations are subject to error and

should be used with caution.
Station positions are shown thus:

(Accurate location) o(Approximate location)

### CALITION

Temporary changes or defects in aids to navigation are not indicated on this chart. See Local Notice to Mariners. During some winter months or when endan-

gered by ice, certain aids to navigation are replaced by other types or removed. For details see U.S. Coast Guard Light List.

# **Table of Selected Chart Notes**

Racing buoys within the limits of this chart are not shown hereon. Information may be obtained from the U.S. Coast Guard District Offices as racing and other private buoys are not all listed in the U.S. Coast Guard Light List.

# LAKE ERIE

#### FISH NETTING AREAS

Various types of nets are employed in Lake Erie of which gill nets, impounding nets and trap nets may create a hazard to mariners. These are marked by buoys of stakes. This diagram shows the areas most intensively fished and the principal type of nets employed. However, fishing gear may be encountered at any location.

Principal Gill Netting Areas

(2) 3

Impounding net Areas

Trap Net Areas

Low Water Datum, which is the plane of reference for the evels shown on the above hydrograph, is also the plane of reference for the charted depths. If the lake level is above or below Low Water Datum, the existing depths are correspondingly greater or lesser than the charted depths.

The prudent mariner will not rely solely on any single aid to navigation, particularly on floating aids. See U.S. Coast Guard Light List and U.S. Coast Pilot for details.

#### POTABLE WATER INTAKE (PWI)

Vessels operating in fresh water lakes or rivers shall not discharge ewage, or ballast, or bilge water within such areas adjacent to domestic water intakes as are designated by the Commissioner of Food and Drugs (21 CFR 1250.93). Consult U.S. Coast Pilot 6 for important supplemental

#### HORIZONTAL DATUM

The horizontal reference datum of this chart is North American Datum of 1983 (NAD 83) and for charling purposes is considered equivalent to the World Geodelic System 1984 (WGS 84). Geographic positions referred to the North American Datum of 1927 must be corrected an average of 0.173" northward and 0.321" eastward to agree with this

### CAUTION

Due to periodic high water conditions in the Great Lakes, some features charted as visible at Low Water Datum may be submerged particularly in the near shore areas. Mariners should proceed with caution.

# SOURCE DIAGRAM

Most of the hydrography identified by the letter "j" was surveyed by the U.S. Army Corps of Engineers prior to 1974. Channels currently maintained by the U.S. Army Corps of Engineers are periodically resurveyed and are not shown on this diagram. Refer to Chapter 1, <u>United States Coast Pilot</u>.

Sailing courses and limits indicated in magenta are recommended by the Lake Carriers Association and the Canadian Shipowners Association.

Gas pipelines and wells contain natural gas under pressure and damage to these installations would create an immediate fire hazard. Vessels anchoring in Lake Erie should do so with caution after noting the underwater, and therefore concealed, positions of all oil and gas wells, pipelines, submarine cables and other installations.

AUTHORITIES. Hydrography and topography by the National Ocean Service, Coast Survey with additional data from the Corps of Engineers, Geological Survey, U.S. Coast Guard, and Canadian

BRIDGE AND OVERHEAD CABLE CLEARANCES. When the water surface is above Low Water Datum, bridge and overhead clearances are reduced correspondingly. For clearances see U.S. Coast Pilot 6.

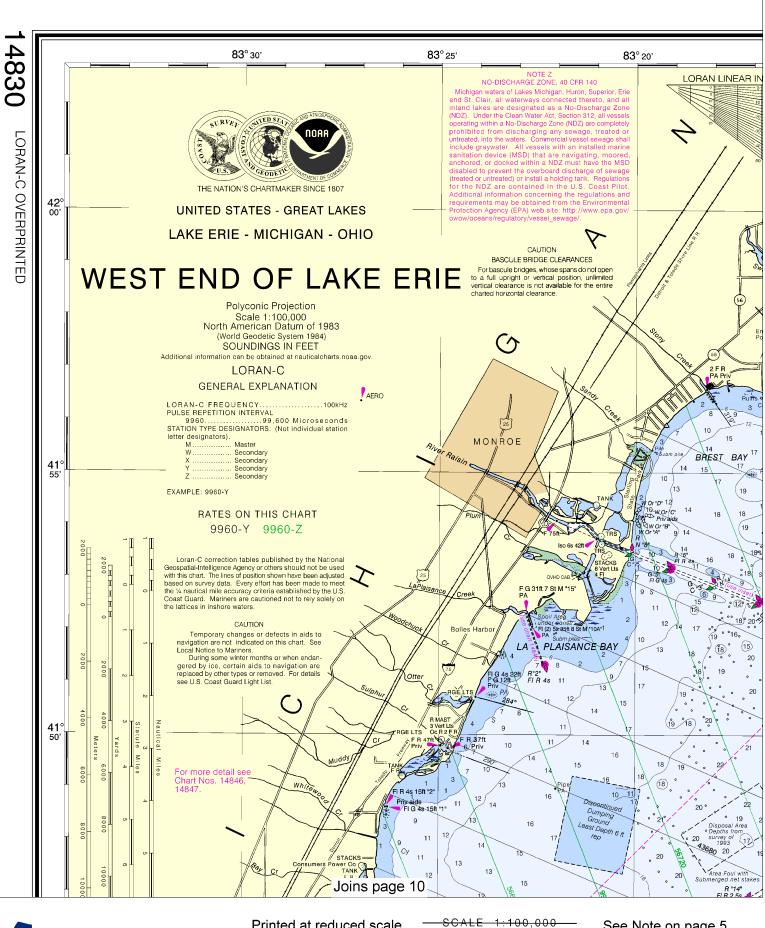
SYMBOLS AND ABBREVIATIONS. For complete list of symbols and abbreviations see Chart

PLANE OF REFERENCE OF THIS CHART (Low Water Datum) Referred to mean water level at Rimouski, Quebec, International Great Lakes Datum (1985).

SAILING DIRECTIONS Bearings of sailing courses are true and distances given thereon are in statute miles between points of departure.

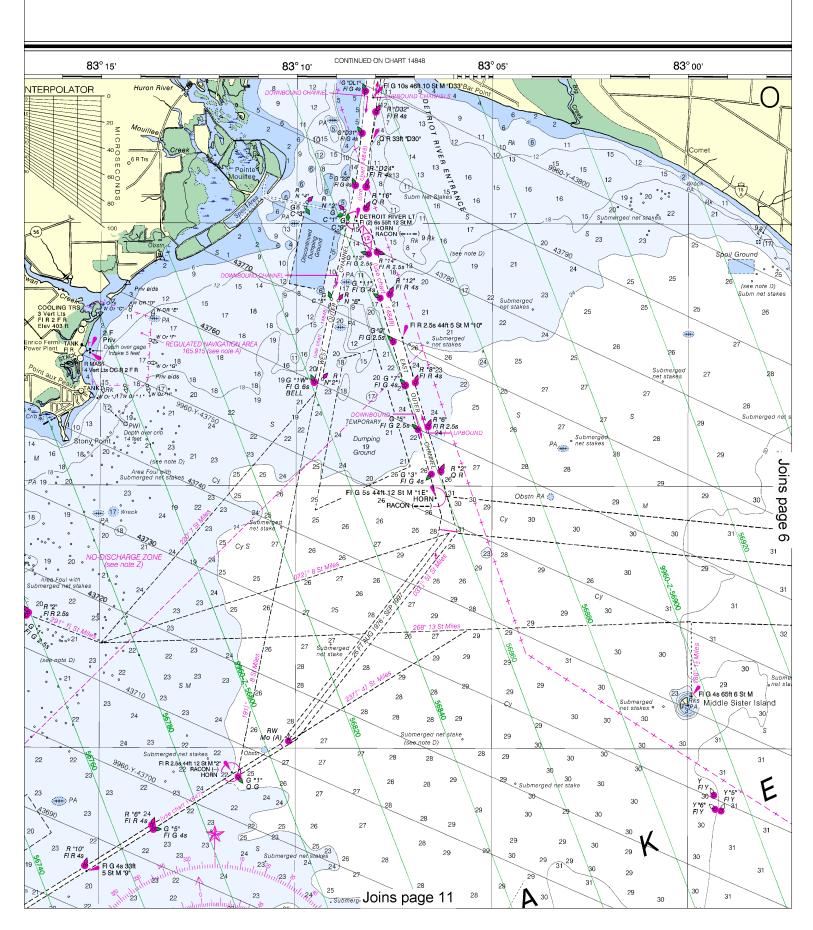


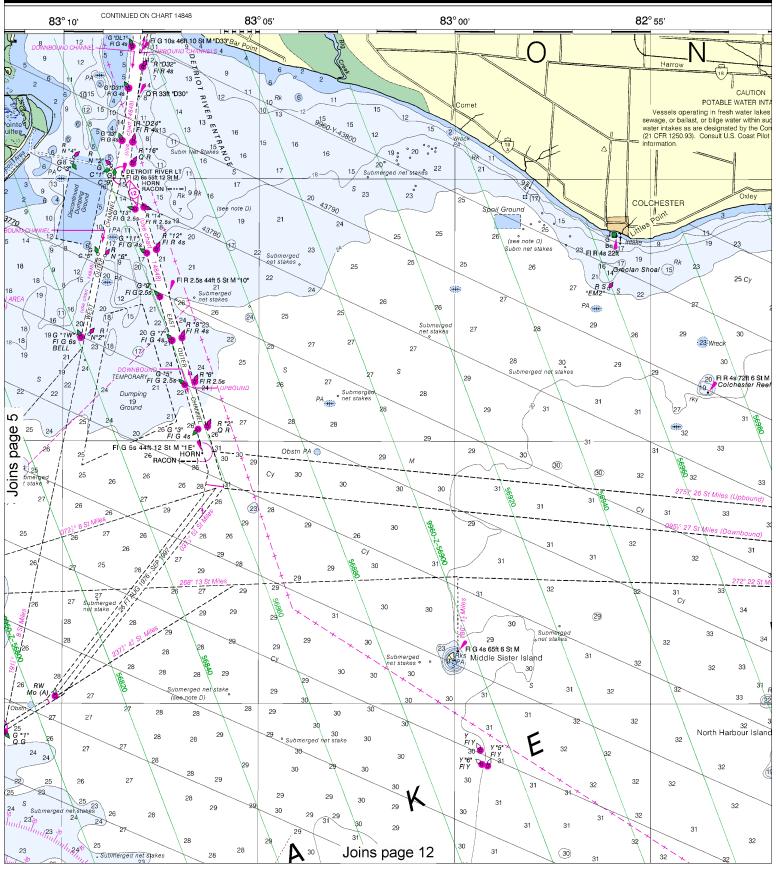
Vessel Traffic Service calling-in point; arrow indicates direction of vessel movement. Mandatory calling-in points are identified numerically. Voluntary calling-in points are identified alphabetically. For additional information see U.S. Coast Pilot 6 and the U.S. and Canadian Notice to Mariners.





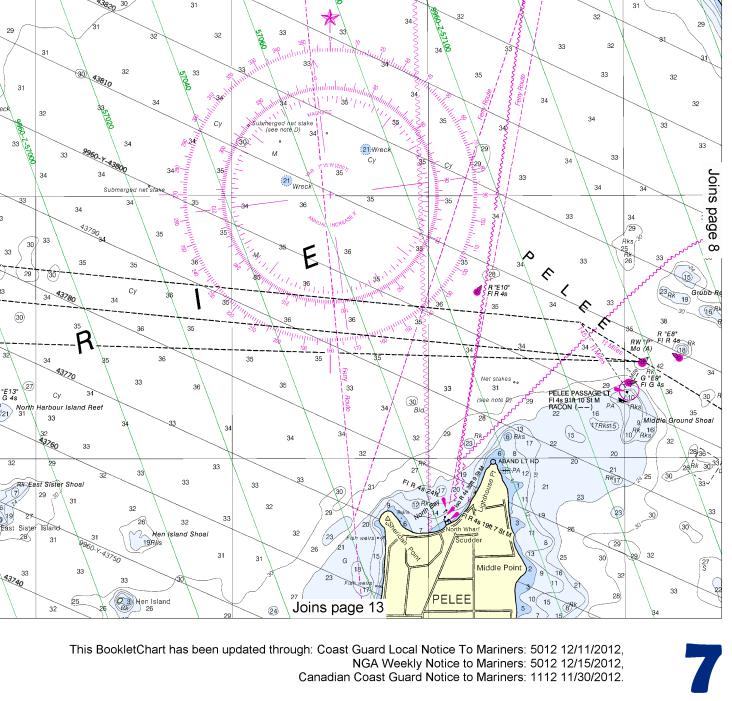








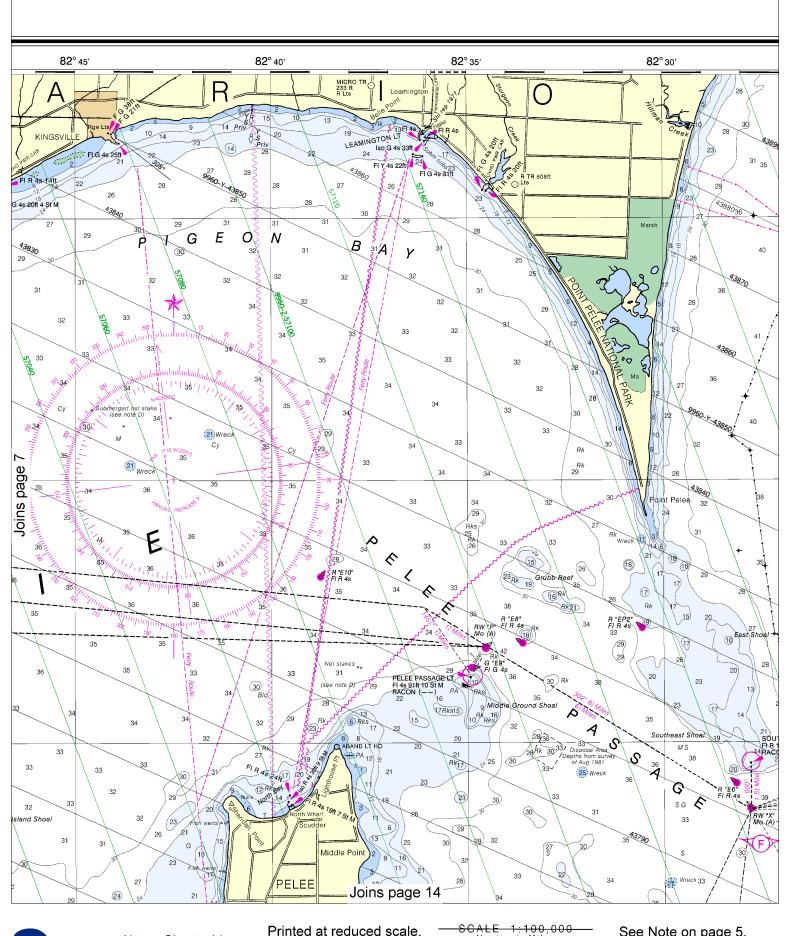




21

33

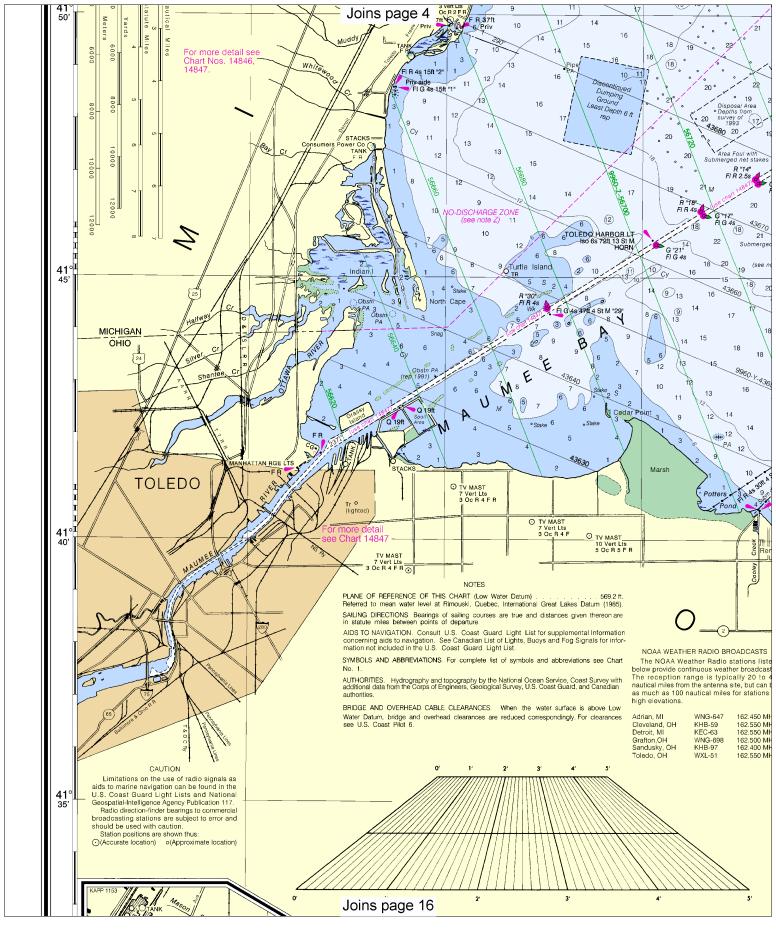
43740



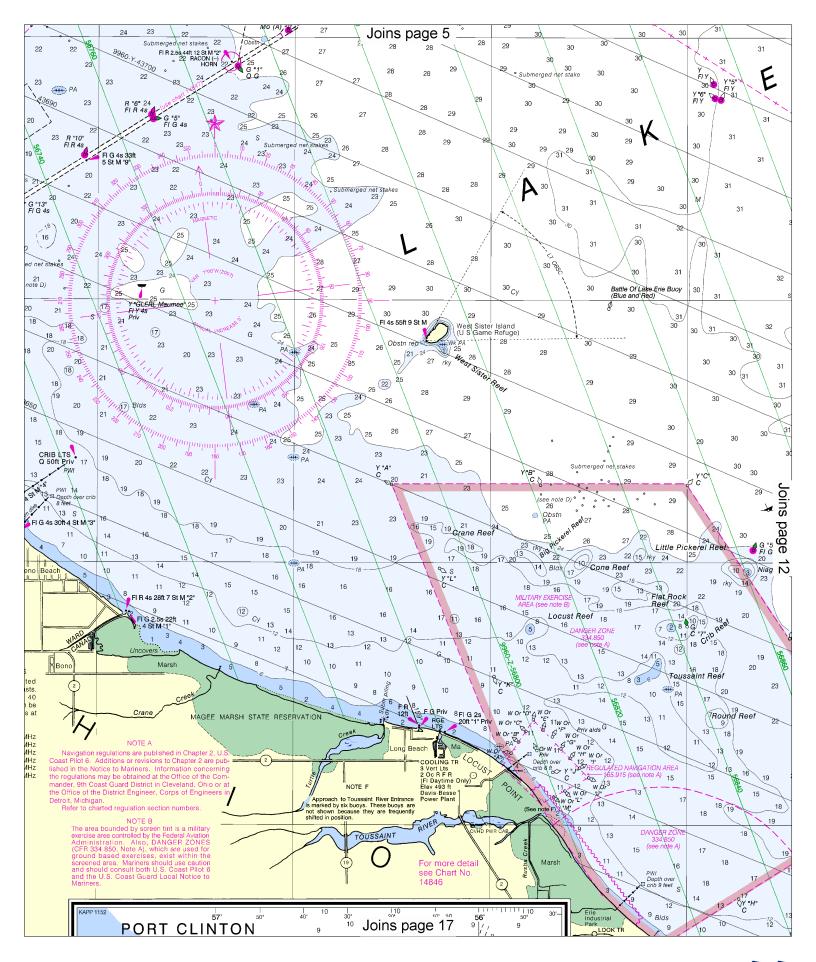


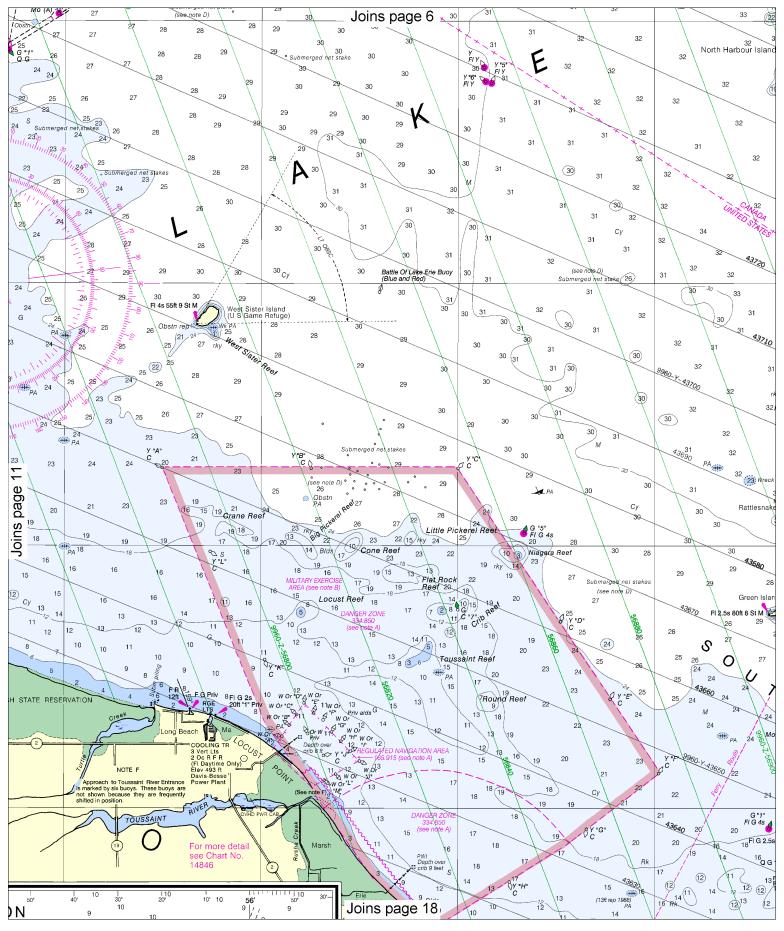


### **SOUNDINGS IN FEET** ° 25' ° 20' **82°** 15' <sup>439</sup>20 62 LAKE ERIE S M 57 FISH NETTING AREAS FISH NETTING AREAS Various types of nets are employed in Lake Erie of which gill nets, impounding nets and trap nets may create a hazard to mariners. These are marked by buoys of stakes. This diagram shows the areas most intensively fished and the principal type of nets employed. However, fishing gear may be encountered at any location. 53 9960.Y-43900 56 Principal Gill Netting Areas Impounding net Areas 42° 00' Trap Net Areas . Windsor (3) ℴ Sandusky Hurc SM ° 55' SM37 <sub>S</sub> ° 50° UTHEAST SHOAL LT\_ 1 10s 70ft CON (---) Joins page 15

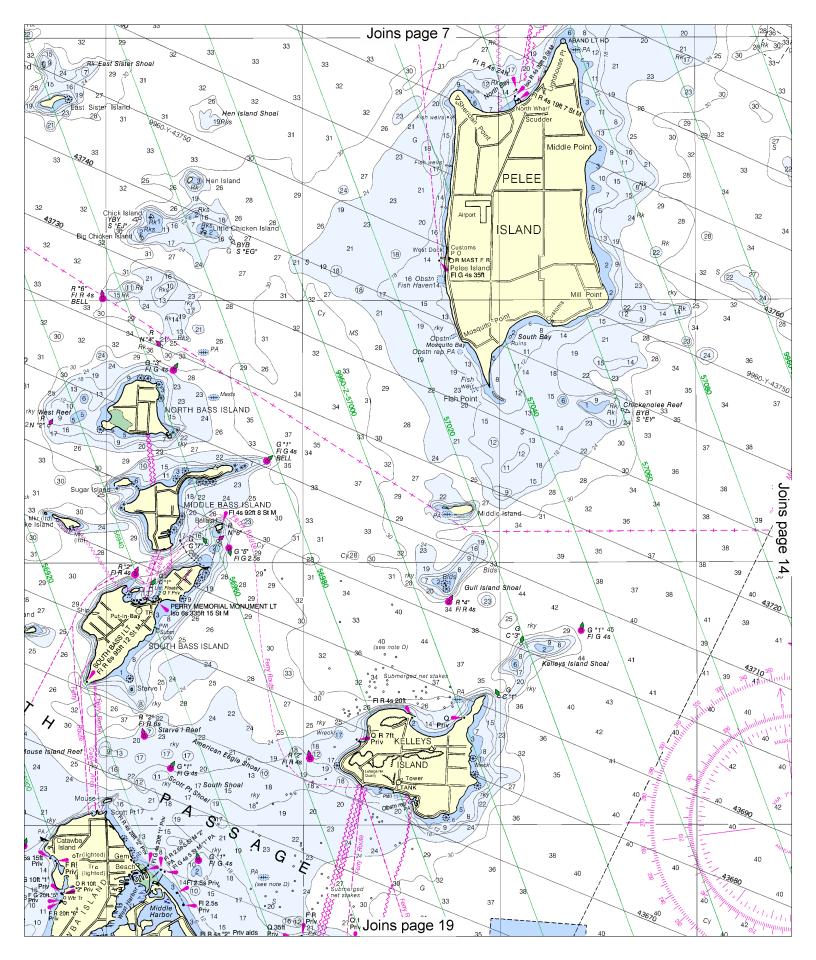


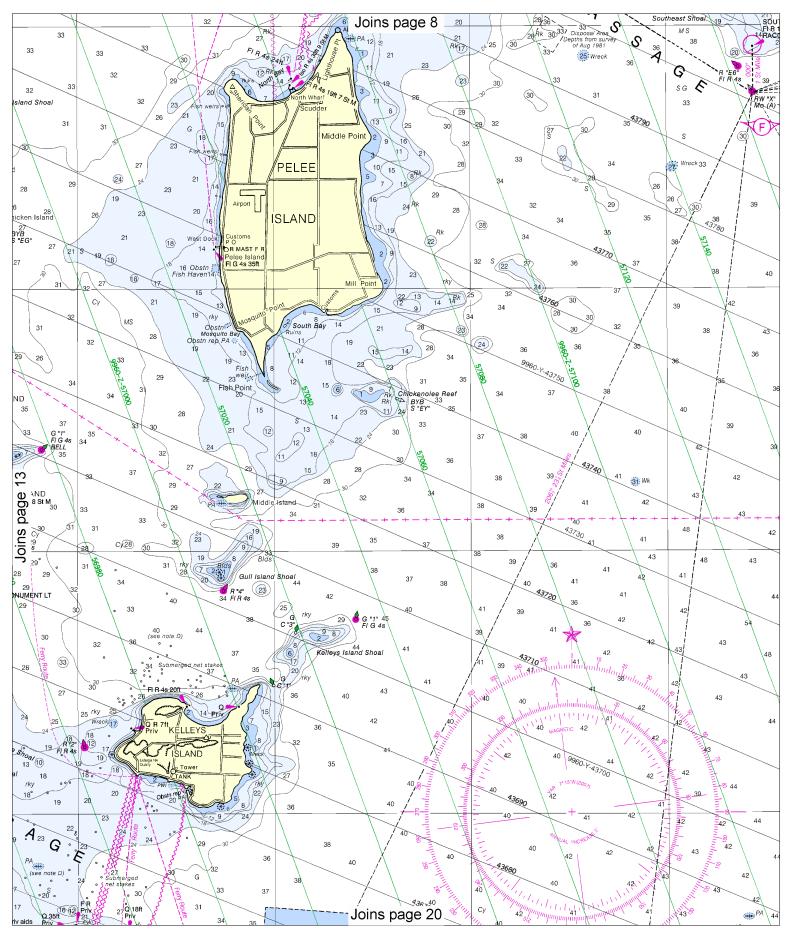


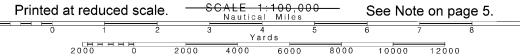


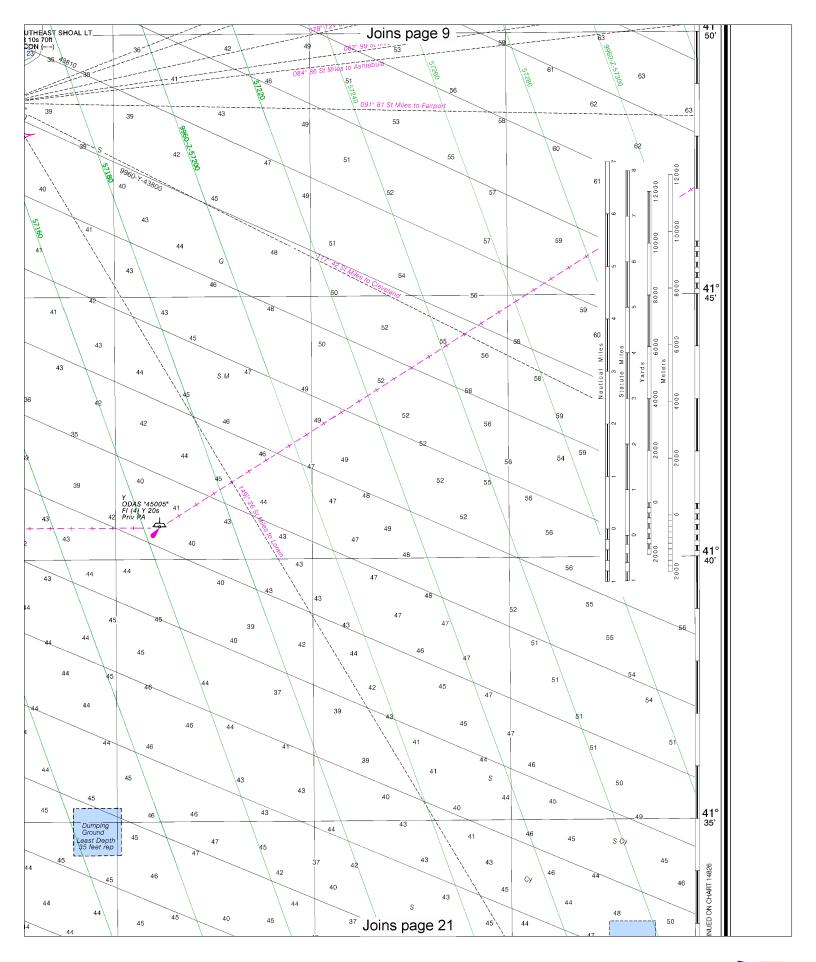


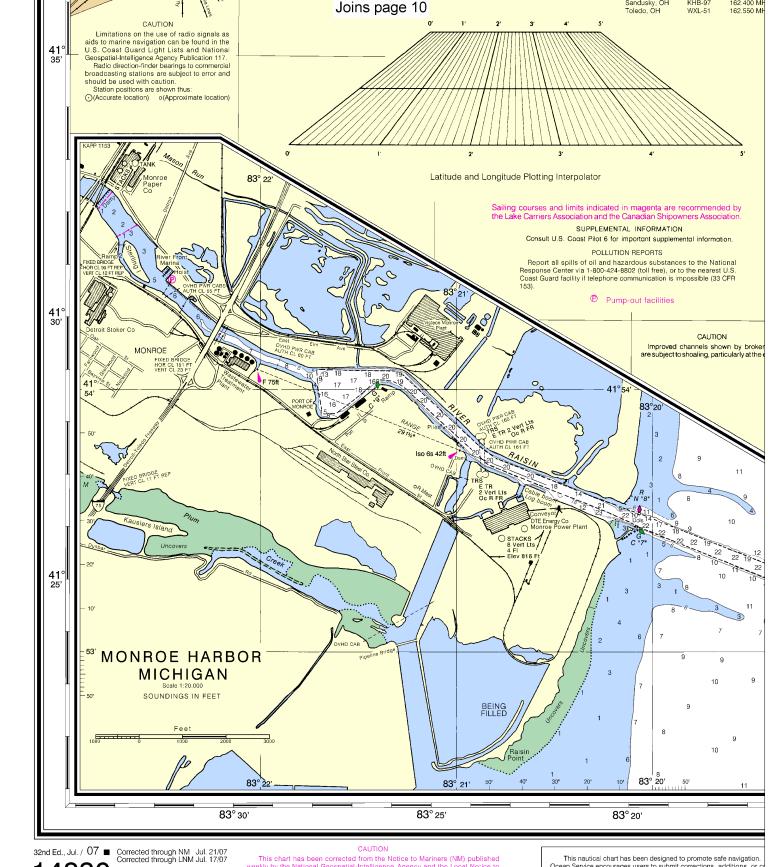












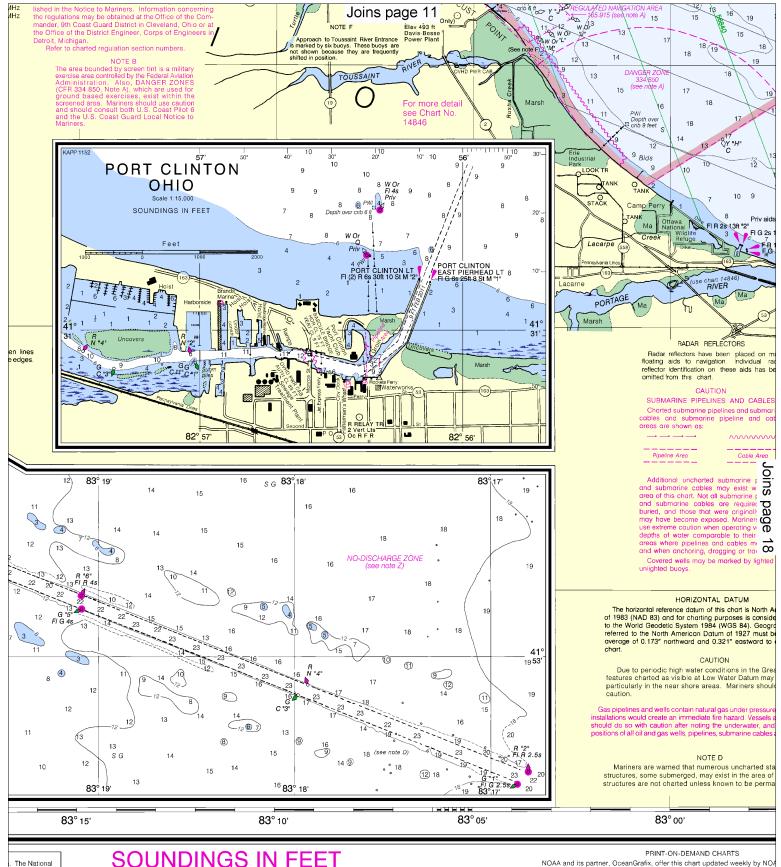
32nd Ed., Jul. / 07 
Corrected through NM Jul. 21/07 Corrected through LNM Jul. 17/07

LORAN-C OVERPRINTED

weekly by the National Geospatial-Intelligence Agency and the Local Notice to Mariners (LNM) issued periodically by each U.S. Coast Guard district to the dates shown in the lower left hand corner. Chart updates corrected from Notice to Mariners published after the dates shown in the lower left hand corner are available at nauticalcharts.noaa.gov

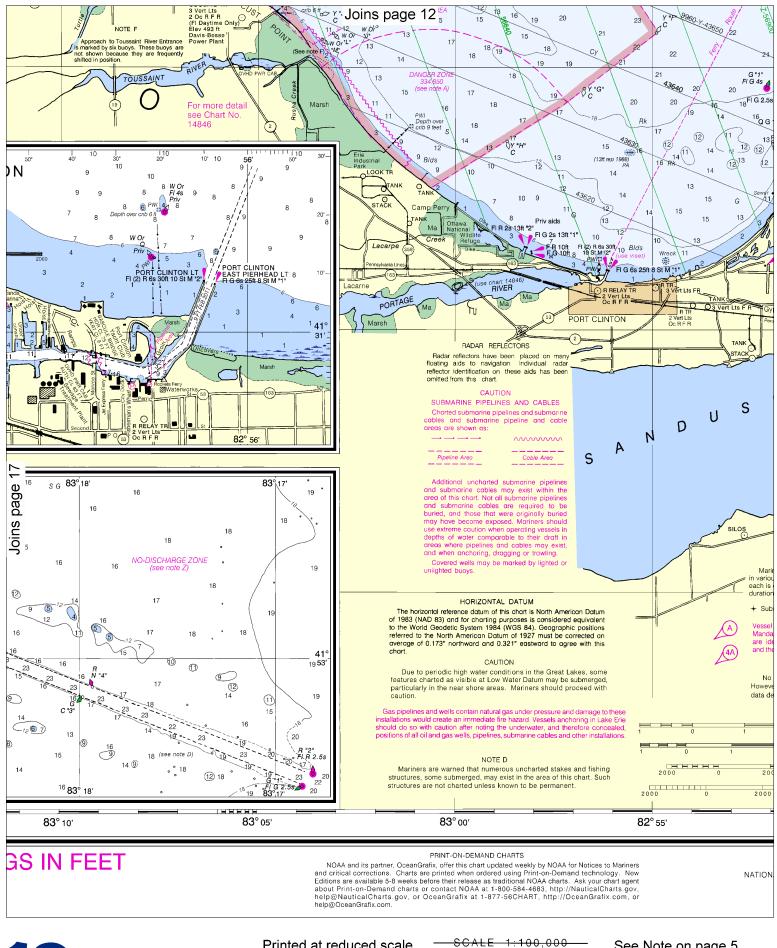
Ocean Service encourages users to submit corrections, additions, or comproving this chart to the Chief, Marine Chart Division (N/CS2), Nat Service, NOAA, Silver Spring, Maryland 20910-3282.



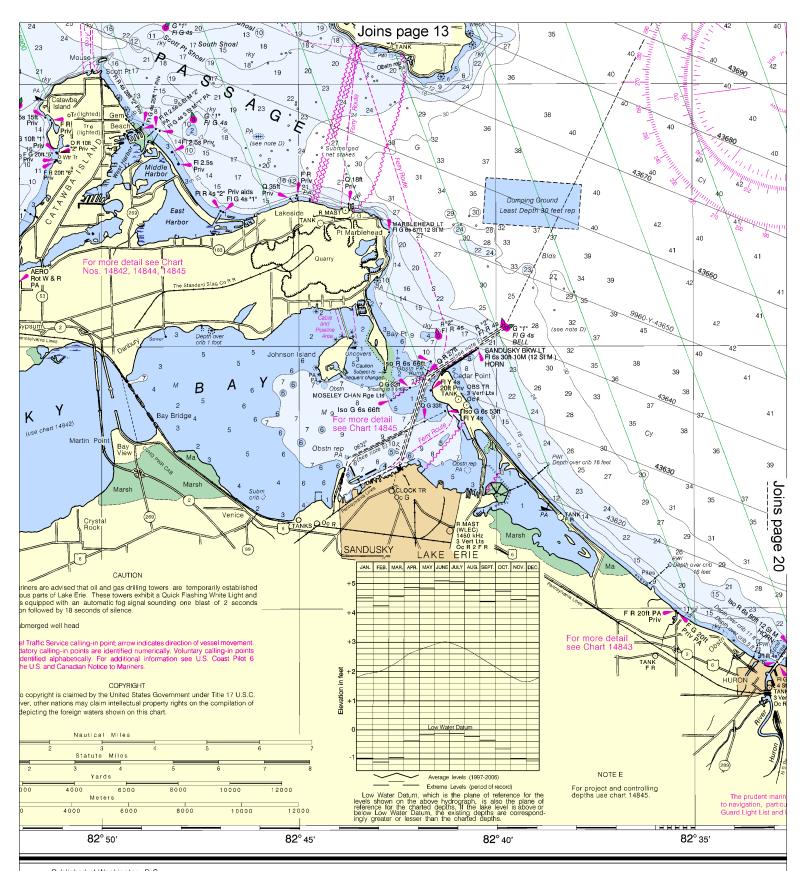


SOUNDINGS IN FEET

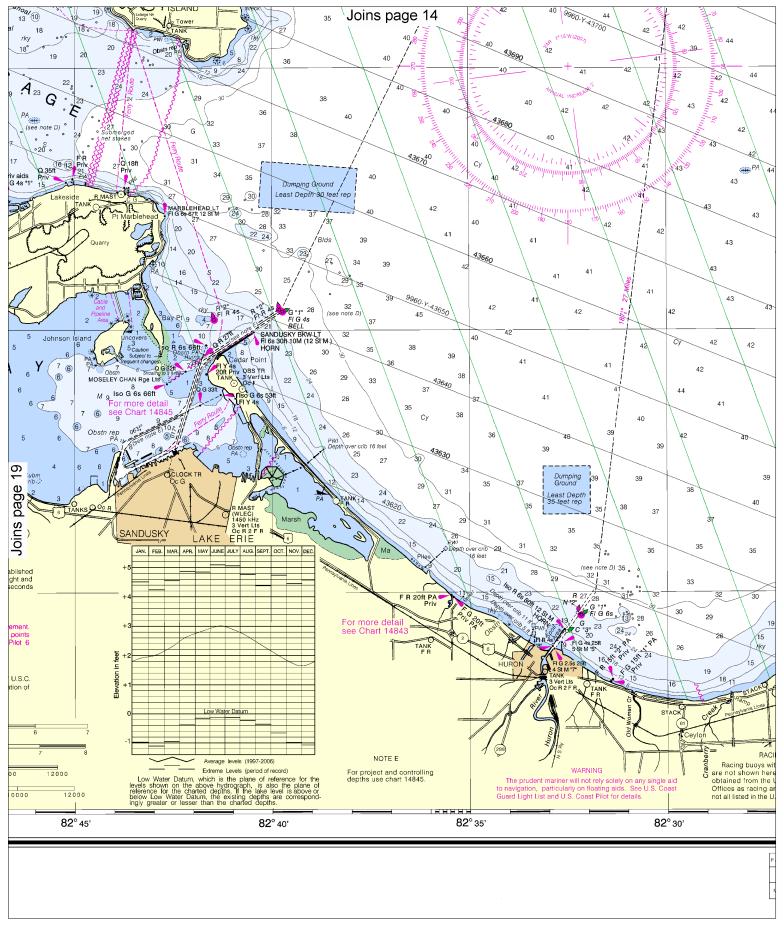
amments for tional Ocean and critical corrections. Charts are printed when ordered using Print-on-De Editions are available 5-8 weeks before their release as traditional NOAA cha about Print-on-Demand charts or contact NOAA at 1-800-584-4883, http: help@NauticalCharts.gov, or OceanGrafix at 1-877-56CHART, http: help@OceanGrafix.com.



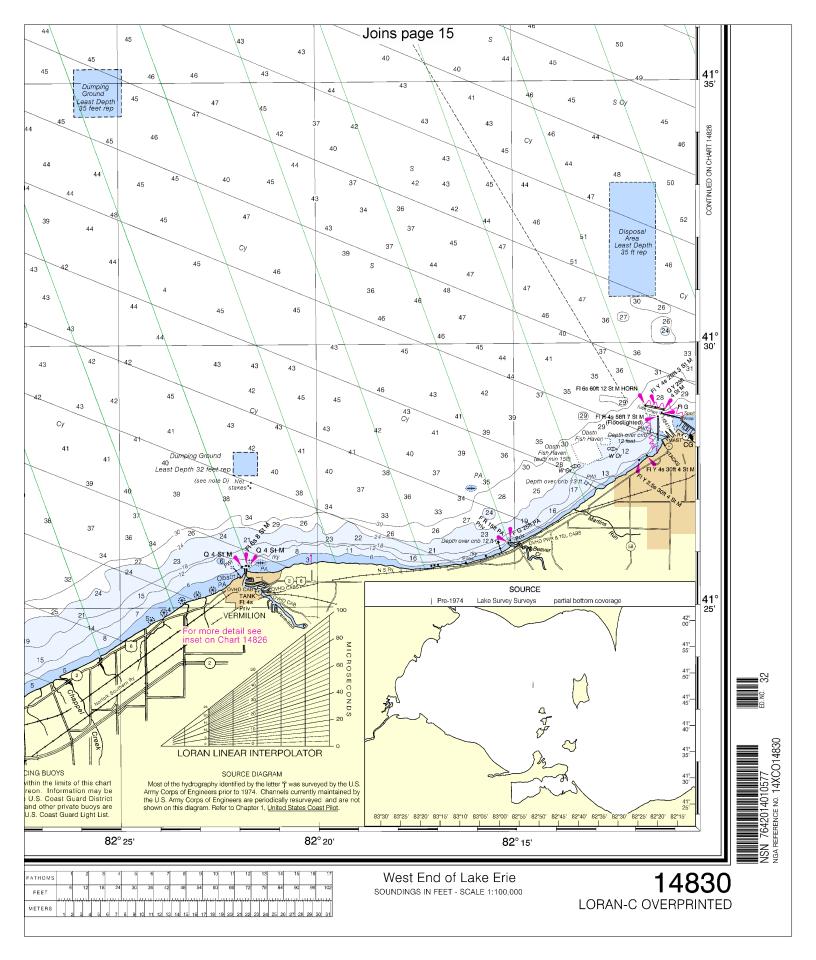




Published at Washington, D.C.
U.S. DEPARTMENT OF COMMERCE
NAL OCEANIC AND ATMOSPHERIC ADMINISTRATION
NATIONAL OCEAN SERVICE
COAST SURVEY









# VHF Marine Radio channels for use on the waterways:

**Channel 6** – Inter-ship safety communications.

Channel 9 – Communications between boats and ship-to-coast.

Channel 13 – Navigation purposes at bridges, locks, and harbors.

Channel 16 – Emergency, distress and safety calls to Coast Guard and others, and to initiate calls to other

vessels. Contact the other vessel, agree to another channel, and then switch.

Channel 22A – Calls between the Coast Guard and the public. Severe weather warnings, hazards to navigation and safety warnings are broadcast here. Channels 68, 69, 71, 72 and 78A – Recreational boat channels.

**Getting and Giving Help** — Signal other boaters using visual distress signals (flares, orange flag, lights, arm signals); whistles; horns; and on your VHF radio. You are required by law to help boaters in trouble. Respond to distress signals, but do not endanger yourself.

## **Distress Call Procedures**

- Make sure radio is on.
- Select Channel 16.
- Press/Hold the transmit button.
- Clearly say: "MAYDAY, MAYDAY, MAYDAY."
- Also give: Vessel Name and/or Description; Position and/or Location; Nature of

Emergency; Number of People on Board.

- · Release transmit button.
- Wait for 10 seconds If no response Repeat MAYDAY call.

HAVE ALL PERSONS PUT ON LIFE JACKETS!



NOAA Weather Radio All Hazards (NWR) is a nationwide network of radio stations broadcasting continuous weather information directly from the nearest National Weather Service office. NWR broadcasts official Weather Service warnings, watches, forecasts and other hazard information 24 hours a day, 7 days a week.

http://www.nws.noaa.gov/nwr/

# **Quick References**

Nautical chart related products and information — http://www.nauticalcharts.noaa.gov

Online chart viewer — <a href="http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html">http://www.nauticalcharts.noaa.gov/mcd/NOAAChartViewer.html</a>

Report a chart discrepancy — http://ocsdata.ncd.noaa.gov/idrs/discrepancy.aspx

Chart and chart related inquiries and comments — http://ocsdata.ncd.noaa.gov/idrs/inquiry.aspx?frompage=ContactUs

Chart updates (LNM and NM corrections) — http://www.nauticalcharts.noaa.gov/mcd/updates/LNM\_NM.html

Coast Pilot online — http://www.nauticalcharts.noaa.gov/nsd/cpdownload.htm

Tides and Currents — http://tidesandcurrents.noaa.gov

Marine Forecasts — http://www.nws.noaa.gov/om/marine/home.htm

National Data Buoy Center — http://www.ndbc.noaa.gov/

NowCoast web portal for coastal conditions — http://www.nowcoast.noaa.gov/

National Weather Service — http://www.weather.gov/

National Hurrican Center — http://www.nhc.noaa.gov/

Pacific Tsunami Warning Center — http://ptwc.weather.gov/

Contact Us — http://www.nauticalcharts.noaa.gov/staff/contact.htm



For the latest news from Coast Survey, follow @nauticalcharts



This Booklet chart has been designed for duplex printing (printed on front and back of one sheet). If a duplex option is not available on your printer, you may print each sheet and arrange them back-to-back to allow for the proper layout when viewing.

